PERMIT NO. HI 0110078

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq.; the "Act"); Hawaii Revised Statutes, Chapter 342D; and Hawaii Administrative Rules (HAR), Department of Health (DOH), State of Hawaii, Chapters 11-54 and 11-55;

UNITED STATES MARINE CORPS
MARINE CORPS BASE HAWAII
KANEOHE BAY, HAWAII
(PERMITTEE)

is authorized to discharge secondary treated wastewater and storm water runoff, from its Marine Corps Base Hawaii (MCBH) Water Reclamation Facility (WRF),

located at the Marine Corps Base Hawaii, Kaneohe Bay, Hawaii,

from

Outfall Serial No.	Latitude	Longitude	Receiving Water
001 (secondary treated wastewater)	21°27'32"N	157°42'56"W	Pacific Ocean through the Mokapu Outfall
002 (storm water runoff)	21°26'30"N	157°45'45"W	Kaneohe Bay and/or coastal wetlands

in accordance with the effluent limitations, monitoring requirements and other conditions set forth herein, and in the attached Department of Health "Standard NPDES Permit Conditions," dated December 30, 2005.

All references to Title 40 of the Code of Federal Regulations (CFR) are to regulations that are in effect on July 1, 2004, except as otherwise specified. Unless otherwise specified herein, all terms are defined as provided in the applicable regulations in Title 40 of the CFR.

This permit will become effective _____.

This permit and the authorization to discharge will expire at midnight, **July 31, 2011**.

Signed this _____ day of _____, 2006.

_____
(For) Director of Health

Public Notice Permit
November 16, 2006

TABLE OF CONTENTS

Part Description Page

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS 4
1. Limitations and Monitoring Requirements 4
2. Sampling Locations 5
3. Monitoring Methods 5

B. RECEIVING WATER LIMITATIONS 7
1. Zone of Mixing (ZOM) 7
2. Recreational Criteria 7
3. Basic Water Quality Criteria 8
4. Water Quality Standards 8

C. WHOLE EFFLUENT TOXICITY LIMITATIONS AND MONITORING REQUIREMENTS 9
1. Chronic Toxicity Testing 9
2. Toxicity Reduction Evaluation (TRE) 11
3. Reporting 12
4. Sampling Frequency Reduction 13
5. Permit Reopener 13

D. REPORTING REQUIREMENTS 14
1. Submittals 14
2. Reporting of Discharge and Monitoring Results 14
3. Reporting of Noncompliance and Other Incidents 15
4. Other Reporting Requirements 17

E. SPECIAL REQUIREMENTS 18
1. Schedule of Submission 18
2. Operation and Maintenance 19
3. Treatment Plant Maintenance and Process Solids Monitoring 19
4. Power Failures 19
5. Response to Sewage Spills, Bypasses, and Upsets 19
6. Onshore or Offshore Construction 21
7. Remedy or Penalty 21

F. INDUSTRIAL PRETREATMENT REQUIREMENTS 22
1. Prohibitions 22
2. Authorized Non-domestic Sewer Dischargers 22
3. Oil Water Separators 22
4. Annual Reports 23

G. SLUDGE REQUIREMENTS 24
1. General Conditions and Requirements 24
2. Sludge Limitations and Monitoring Requirements 25
3. Requirements for Sludge Disposed of in Municipal Solid Waste Landfills 28
4. Requirements for Sludge Disposed of in Surface Disposal Sites 28
5. Requirements for Sludge that is Land-Applied 28
6. Notification Requirements 29
7. Annual Report 29

H. WASTEWATER POLLUTION PREVENTION PROGRAM 32
1. Annual Report 32
2. Flow Rate Notification 32

I. STORM WATER MONITORING AND REPORTING REQUIREMENTS 34
1. Limitations and Monitoring Requirements 34
2. Monitoring Methods 35
3. Sampling Location 35
4. Storm Water Pollution Control Plan (SWPCP) 36

J. SPECIFIC WATER QUALITY PARAMETERS EFFLUENT REQUIREMENTS 37
1. Monitoring Requirements 37
2. Initial Investigation Evaluation Plan 37
3. Increase in Monitoring and Reporting Requirements 37
4. Reduction Evaluation Plan 37

K. DEFINITIONS 39

L. MCBH KANEOHE WRF MAPS AND DIAGRAMS 41
1. Location Map 41
2. Site Plan and Flow Diagram 42
3. Collection System Diagram 43

ATTACHMENT A: TCLP PARAMETER LIST 44

ATTACHMENT B: PRIORITY POLLUTANTS 46

STANDARD NPDES PERMIT CONDITIONS - Updated as of December 30, 2005 (Attached)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Serial No. 001 (based on a design capacity of 2.0 MGD)

1. Limitations and Monitoring Requirements

During the period beginning with the effective date of this permit and lasting through **July 31, 2011**, the Permittee is authorized to discharge secondary treated wastewater (hereinafter "Discharge") from Outfall Serial No. 001. The discharge from Outfall Serial No. 001 to the Pacific Ocean through the Mokapu Outfall shall be limited and monitored by the Permittee as specified below:

Discharge Parameter	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	30-day Average	7-day Average	Daily Maximum	Units	Minimum Frequency	Type of Sample
Flow {1}	Report	Report	Report	m^3/day or MGD	Continuous	Recorder/ Totalizer
Biochemical Oxygen Demand (5-day) {1}	30 (500)	45 (751)	Report	mg/l (lbs/day)	Once/Week {2}	24-hr Composite
Total Suspended Solids {1}	30 (500)	45 (751)	Report	mg/l (lbs/day)	Once/Week {2}	24-hr Composite
Oil and Grease	{3}	{3}	10	mg/l	Once/Week {2}	Grab
Total Nitrogen	{3}	{3}	{4}	mg/l	Once/ Calendar Month	24-hr Composite
Total Phosphorus	{3}	{3}	{4}	mg/l	Once/ Calendar Month	24-hr Composite
pH	Not less than 6.0 nor greater than 9.0.			Standard Units	Once/Week {2}	Grab
Whole Effluent Toxicity {5}	186 TU_c (Chronic)			Chronic Toxic Units	Once/ Calendar Month	24-hr Composite
Enterococcus Bacteria {6}	{7}	{7}	{7}	#/100ml	5 Times/ Month	Grab
Total Copper	{3}	{3}	2.9	µg/l	Once/ Calendar Year	24-hr Composite
Total Mercury	{3}	{3}	2.1	µg/l	Once/ Calendar Year	24-hr Composite
Priority Toxic Pollutants {8}	{7}	{7}	{7}	µg/l	Once/ Calendar Year	24-hr Composite

m^3/day = cubic meters per day
MGD = million gallons per day

mg/l = milligrams per liter = 1000 micrograms per liter
µg/l = microgram per liter
ml = milliliters

NOTES:

{1} The Permittee shall monitor both the influent and effluent. The 30-day average percent removal for Biochemical Oxygen Demand (5-day) and Total Suspended Solids shall not be less than 85 percent.

{2} Monitoring shall be done at a minimum of once (1 time) per week with each day of the week (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday) sampled at least once every two (2) months. If any weekly effluent sample for BOD_5 or suspended solids exceeds 45 mg/l, the monitoring frequency for that parameter shall increase to four (4) times per week for a period of four (4) weeks.

{3} Not Applicable.

{4} No limitation at this time. Comply with Part J. of this permit.

{5} Whole effluent toxicity testing shall be conducted in accordance with the provisions of Part C of this permit.

{6} Enterococci sampling frequency shall be not less than five samples which shall be equally spaced at six (6) day intervals or unequally spaced at five (5), six (6), seven (7) or eight (8) day intervals, provided that the total period covered is between 25 and 30 days. Consecutive samples shall not be collected on the same day of the week. Enterococci monitoring shall be conducted in accordance with the provisions of the 20th Edition of the *Standard Methods* or the most current edition.

{7} No limitation at this time. Only monitoring and reporting required.

{8} The annual Environmental Protection Agency (EPA) priority pollutants scan shall exclude asbestos, total copper, and total mercury. Detection levels shall be reported once per year and shall meet the requirements of 40 CFR Part 136. See Attachment B of this permit for the Priority Pollutants List.

2. Sampling Locations

a. The Permittee shall take all influent samples downstream of any additions to the trunk sewer, upstream of any in-plant return flows, and prior to treatment.

b. The Permittee shall take all effluent samples downstream from any additions to the treatment plant and any in-plant return flows or disinfection units, and prior to mixing with the receiving waters.

c. The Permittee shall not change sampling locations without the notification to and the approval from the Director.

3. Monitoring Methods

a. Conduct monitoring in accordance with test procedures approved under 40 CFR Part 136, or unless otherwise specified, with detection limits low enough to measure compliance with the discharge limitations specified in Part A.1 of this permit. For cases where the discharge limitation is below the lowest detection limit of the appropriate test procedure, the Permittee shall use the test method with the lowest detection limit.

b. The Director of Health (Director) may specify additional monitoring requirements and limitations, in addition to the monitoring requirements specified in Part A.1. of this permit.

B. RECEIVING WATER LIMITATIONS

1. Zone of Mixing (ZOM)

   The discharge of wastes from Outfall Serial No. 001 shall not cause or contribute to the exceedance of the specific criteria for "Class A" "Open Coastal Waters" at or beyond the boundary of the Zone of Mixing issued to the City and County of Honolulu's Kailua Regional Wastewater Treatment Plant (Kailua Regional WWTP) for the Mokapu Ocean Outfall. The specific criteria is contained in HAR, Chapter 11-54, Section 11-54-6(b)(3) of the State Water Quality Standards. The ZOM (No. ZM-97) issued to the Kailua Regional WWTP (NPDES Permit No. HI 0021296) for the Mokapu Ocean Outfall may be administratively extended or renewed.

2. Recreational Criteria

   a. The discharge of wastewater from Outfall Serial No. 001 shall not cause or contribute to a violation of the specific criteria for marine recreational waters within 300 meters (1,000 feet) from the shoreline.

      (1) Enterococcus content shall not exceed a geometric mean of seven (7) colony forming units (CFU) per 100 milliliters (7CFU/100ml) in not less than five (5) samples which shall be spaced to cover a period between 25 and 30 days. No single sample shall exceed the single sample maximum of 100 CFU per 100 milliliters (100CFU/100ml) or the site-specific one-sided 75 per cent confidence limit. Marine recreational waters along sections of coastline where enterococcus content does not exceed the standard, as shown by the geometric mean test described above, shall not be lowered in quality.

      (2) At locations where sampling is less frequent than five (5) samples per 25 to 30 days, no single sample shall exceed the single sample maximum nor shall the geometric mean of these samples taken during the 30-day period exceed 7 CFU per 100 milliliters.

   b. The discharge of wastewater from Outfall Serial No. 001 shall not cause or contribute to a violation of the following specific criteria for marine recreational waters 300 meters (1,000 feet) from the shoreline until three (3) miles from the shoreline.

      (1) Enterococcus content shall not exceed a geometric mean of 35 CFU per 100 milliliters (35CFU/100ml) per quarter. No single sample shall exceed the single sample maximum of 104 CFU per 100 milliliters (104CFU/100ml). Marine recreational waters along sections of coastline where enterococcus content does not exceed the standard, as shown by the geometric mean test described above, shall not be lowered in quality.

      (2) Sampling for the recreational area monitoring shall be conducted on the same day that the ZOM and effluent sampling for these parameters is conducted.

c. Raw or inadequately treated sewage, sewage for which the degree of treatment is unknown, or other pollutants of public health significance, as determined by the Director, shall not be present in natural public swimming, bathing or wading areas. Warning signs shall be posted at locations where human sewage has been identified as temporarily contributing to the enterococcus count.

3. Basic Water Quality Criteria

The discharge of storm water from Outfall Serial No. 002 shall not cause or contribute to water quality criteria violations by complying with the basic water quality criteria, HAR, Chapter 11-54, Section 11-54-4(a), which states:

"All waters shall be free of substances attributable to domestic, industrial, or other controllable sources of pollutants, including:

(1) Materials that will settle to form objectionable sludge or bottom deposits;
(2) Floating debris, oil, grease, scum, or other floating materials;
(3) Substances in amounts sufficient to produce taste in the water or detectable off-flavor in the flesh of fish, or in amounts sufficient to produce objectionable color, turbidity or other conditions in the receiving waters;
(4) High or low temperatures; biocides; pathogenic organisms; toxic, radioactive, corrosive, or other deleterious substances at levels or in combinations sufficient to be toxic or harmful to human, animal, plant, or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water;
(5) Substances or conditions or combinations thereof in concentrations which produce undesirable aquatic life; and
(6) Soil particles resulting from erosion on land involved in earthwork, such as the construction of public works; highways; subdivisions; recreational, commercial, or industrial developments; or the cultivation and management of agricultural lands."

4. Water Quality Standards

The discharge shall not cause or contribute to a violation of any of the applicable beneficial uses or water quality objectives contained in HAR, Chapter 11-54, titled Water Quality Standards.

C. WHOLE EFFLUENT TOXICITY LIMITATIONS AND MONITORING REQUIREMENTS

1. Chronic Toxicity Testing

The Permittee shall conduct or have a contract laboratory conduct monthly chronic toxicity tests on flow-weighted 24-hour composite effluent samples in accordance with the procedures outlined below.

If the Permittee experiences difficulty in obtaining gametes or has unacceptable control performance while conducting the sea urchin sperm/fertilization bioassay during a monitoring period, the Permittee shall document its efforts, communicate all attempts to the Director, and report all attempts on the discharge monitoring report for that monitoring period.

It shall not be considered a noncompliance of the whole effluent toxicity requirements if it can be proven to the Director's satisfaction that the inability in obtaining gametes for testing was due to circumstances beyond the Permittee's control.

a. Definition of Chronic Toxicity

Chronic toxicity measures a sublethal effect (e.g., reduced growth) to experimental test organisms exposed to an effluent compared to that of the control organisms. The No Observed Effect Concentration (NOEC) is the highest effluent concentration to which organisms are exposed in a chronic test, that causes no observable adverse effect on the test organisms (e.g., the highest concentration of toxicant to which the values for the observed responses are <u>not</u> statistically significantly different from the controls). Test results shall be reported in TU_c, where $TU_c = 100/NOEC$.

Chronic toxicity for *Ceriodaphnia dubia* is defined by an exceedance of the chronic toxicity discharge limitation specified in Part A.1. of this permit. This chronic toxicity discharge limitation does not apply to monitoring results for toxicity tests using *Tripneustes gratilla*. Rather, for the purposes of additional (accelerated) testing, toxicity reduction evaluation/toxicity identification evaluation, and reporting requirements below, chronic toxicity for *Tripneustes gratilla* is defined by an exceedance of a chronic toxicity threshold value of 186 TU_c, applied as a daily maximum.

b. Test Species and Methods

(1) The Permittee shall conduct monthly chronic toxicity testing on the following species using the methods specified:

(a) *Ceriodaphnia dubia* using *Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms* (EPA-821-R-02-013, October 2002, or subsequent editions).

(b) *Tripneustes gratilla* using *Hawaiian Collector Urchin, Tripneustes gratilla (Hawa'e) Fertilization Test Method*, 3/16/98 (Adapted by Amy Wagner, EPA Region 9 Laboratory, Richmond, CA from a method developed by George Morrison, EPA, ORD Narragansett, RI and Diane Nacci, Science Applications International Corporation, ORD Narragansett, RI).

(2) Upon written request by the Permittee and written approval by the Director, or upon request by the Director, the Permittee shall use updated versions of the methods referenced in the section above as they become available from EPA.

(3) If the Permittee uses static tests, the daily renewal solutions shall be fresh 24-hour composite samples, unless samples are shipped off-island to a contract laboratory in which case one 24-hour composite sample may be used for all renewals. The Permittee may switch between species of sea urchin without the prior approval from the Director.

(4) If the salinity of effluent dilutions required under Part C.1.c. of this permit is higher than that tolerated by *Ceriodaphnia dubia*, then the presence of chronic toxicity shall be estimated using a test species and method specified in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms* (EPA-821-R-02-014, October 2002).

c. Quality Assurance

(1) A series of five (5) dilutions and a control shall be tested. The series shall include the in-stream waste concentration (IWC), two (2) dilutions below the IWC, and two (2) dilutions above the IWC (e.g., 12.5, 25, 50, 75, and 100 percent effluent, where IWC = 50). The chronic IWC for this discharge is 0.85 percent effluent.

(2) If organisms are cultured in-house, then monthly reference toxicant testing is sufficent. If organisms are not cultured in-house, then concurrent testing with reference toxicants shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as effluent toxicity tests (i.e., same test duration, etc.).

(3) If either the reference toxicant tests or the effluent tests do not meet all test acceptability criteria as specified in the test methods manual, then the Permittee must re-sample and re-test within approximately 14 days.

(4) Control and dilution water shall be receiving water or lab water, as described in the test methods manual. If dilution water is different from culture water, then a second control using culture water shall also be tested. To maintain acceptable salinity when conducting effluent tests with *Tripneustes gratilla*, effluent dilutions shall be adjusted by adding hypersaline brine/GP2 salts and a third control using brine shall also be tested.

(5) Reference toxicant and effluent tests must meet the percent minimum significant difference (PMSD) criteria for *Ceriodaphnia dubia* found in Table 3-6 of *Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program* (EPA 833-R-00-003, June 2000).

2. Toxicity Reduction Evaluation (TRE)

a. Preparation of Initial Investigation TRE Workplan

The Permittee shall resubmit to the Director and EPA Region 9 Administrator (Regional Administrator) an initial investigation TRE workplan (approximately 1-2 pages) within 120 days of the effective date of this permit. This workplan shall describe steps which the Permittee intends to follow in the event that chronic toxicity is detected, and at minimum, shall include the following:

(1) Description of the investigation and evaluation techniques that would be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency.

(2) Description of the facility's method of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in operation of the facility.

(3) Identification of the organization (e.g. contract laboratory, etc.) that will conduct the evaluation if a toxicity identification evaluation (TIE) becomes necessary.

b. Additional (Accelerated) Toxicity Testing

(1) If chronic toxicity is detected, the Permittee shall conduct six (6) additional tests, one (1) approximately every 14 days, over a 12-week period. The Permittee shall commence effluent sampling for the first test of the six (6) additional tests within one (1) week from completion of the test which exceeded the toxicity discharge limitation.

(2) However*, if implementation of the initial investigation TRE workplan indicates the source of toxicity* (e.g., a temporary plant upset, etc.), then the Permittee shall conduct only the first test of the six (6) additional tests required above. If chronic toxicity is not detected in this first test, then the Permittee shall return to the normal sampling frequency required in Part A.1 of this permit. If chronic toxicity is detected in this first test, then Part C.2.c of this permit shall apply.

(3) If chronic toxicity is not detected in any of the six (6) additional tests required above, then the Permittee shall return to the normal sampling frequency required in Part A.1 of this permit.

c. Toxicity Reduction Evaluation/Toxicity Identification Evaluation (TRE/TIE)

(1) If chronic toxicity is detected in any of the six (6) additional tests, then, based on an evaluation of the test results and additional available information, the Director and Regional Administrator may determine that the Permittee shall initiate a TRE, in accordance with the Permittee's initial investigation TRE workplan and *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA 833-B-99-002, 1999). Moreover, the Permittee shall develop and submit to the Director and Regional Administrator for approval within 14 days from when toxicity was detected a detailed TRE workplan which includes:

(a) Further actions to investigate/identify the cause(s) of toxicity.

(b) Actions the Permittee has taken/will take to mitigate the impact of the discharge, to correct the noncompliance, and to prevent the recurrence of toxicity.

(c) Schedule under which these actions will be implemented.

(2) As part of this TRE process, the Permittee may initiate a TIE using the manuals: EPA/600/6-91/005F (Phase I - freshwater), EPA/600/R-96/054 (Phase I - marine), EPA/600/R-92/080 (Phase II), and EPA/600/R-92/081 (Phase III), to identify the cause(s) of toxicity.

(3) If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required by Part C.2.b of this permit, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE.

3. Reporting

a. The Permittee shall report whole effluent toxicity exceendances within 48 hours of completion of the test.

b. The Permittee shall submit a full laboratory report of toxicity test results, including any toxicity testing required by Parts C.2.b and C.2.c of this permit, with the DMR for the month in which the toxicity tests are conducted. A full laboratory report, at a minimum, shall consist of: (1) toxicity test results (including calculated sperm to egg ratio for *Tripneustes gratilla*); (2) dose response curve; (3) dates of sample collection and initiation of each toxicity test; and (4) the toxicity discharge limitation (or threshold value). Toxicity test results shall be reported according to the test methods manual chapter on Report Preparation.

If the initial investigation TRE workplan is used to determine that additional (accelerated) toxicity testing is unnecessary, these results shall be submitted with the DMR for the month in which investigations conducted under the TRE workplan occurred.

c. Within 14 days of receipt of test results exceeding a toxicity discharge limitation, the Permittee shall provide written notification to the Director and Regional Administrator of:

(1) Findings of the TRE or other investigation to identify the cause(s) of toxicity, if a TRE is requested by the Director.

(2) Actions the Permittee has taken/will take, to mitigate the impact of the discharge and to prevent the recurrence of toxicity.

(3) Implementation schedule for corrective actions when corrective actions, including a TRE, if a TRE is requested by the Director, have not been completed.

(4) Reason for not taking corrective action, if no action has been taken.

4. Sampling Frequency Reduction

a. If the Permittee has not violated the chronic toxicity discharge limitation specified in Part A.1 of this permit after completing 24 consecutive months of testing, then the Permittee may request a reduction in monitoring frequency.

b. Any such reduction of the monitoring frequency must be approved by the Director in writing, and shall be at the Director's sole discretion.

c. A reduction in frequency to once per year or more shall be considered a minor modification for the purposes of 40 CFR 124.

d. If the Permittee violates the chronic toxicity discharge limitation after the reduction in monitoring frequency becomes effective, then monitoring frequency shall return to once per month for the duration of this permit.

5. Permit Reopener

This permit may be modified, in accordance with 40 CFR 122 and 124, to include conditions or limitations to address demonstrated effluent toxicity based on newly available information.

Nothing in Part C of this permit waives any remedy or penalty applicable under *Hawaii Revised Statutes*, Chapter 342D.

D. REPORTING REQUIREMENTS

1. Submittals

   a. Submit all information in accordance with HAR, Chapter 11-55, Section 11-55-07(b), with the permit number, **HI 0110078**, the following certification statement, and the Commander's or Deputy Commander's or duly authorized representative's, as applicable, signature:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

   b. Submit all information required under this permit to the following addresses:

      (1) Director of Health
      Clean Water Branch
      Environmental Management Division
      Department of Health
      P.O. Box 3378
      Honolulu, HI 96801-3378
      Telephone: (808) 586-4309
      Fax: (808) 586-4352

      (2) Regional Administrator
      U.S. Environmental Protection Agency, Region 9
      Attention: WTR-7; NPDES/DMR
      75 Hawthorne Street
      San Francisco, CA 94105-3901

2. Reporting of Discharge and Monitoring Results

   a. The Permittee shall summarize and report monitoring results obtained during the previous monitoring period on a Discharge Monitoring Report (DMR) Form (EPA No. 3320-1).

   b. The Permittee shall submit the results of all monitoring required by this permit in such a format as to allow direct comparison with the limitations and requirements of this permit.

   c. The Permittee shall have monitoring reports postmarked no later than the 28th day of the month following the completed monitoring period.

   d. The Permittee shall submit duplicate signed copies of these, and all other reports required herein, to the Regional Administrator and Director.

3. Reporting of Noncompliance and Other Incidents

The following requirements replace the 24-hour notice requirements for bypasses (Standard NPDES Conditions Section 17(d)(2)(B) and 40 CFR Section 122.41(1)(6)(ii)(A)) and upsets (Standard NPDES Conditions Section 18(c)(3) and 40 CFR Section 122.41(1)(6)(ii)(B)).

a. Immediate Reporting

(1) In the event of a bypass, upset, or sewage spill resulting in or contributing to a discharge to State waters, the Permittee shall orally notify the Clean Water Branch (CWB) at the time the Permittee's authorized personnel become aware of the circumstances, but no later than 24 hours after the event.

(2) In the event of a bypass, upset, or sewage spill resulting in or contributing to a discharge of 1,000 gallons or more (or lesser spills if they present a substantial threat to public health) to State waters or occurring outside of the facility, the Permittee shall orally notify the CWB and the Associate Press news wire services at the time the Permittee's authorized personnel become aware of the circumstances, but no later than 24 hours after the event. The press release shall include the following:

(a) Location of the spill
(b) Amount of sewage released
(c) What caused the spill
(d) What is being done to rectify the situation
(e) Contact person and telephone number (including after hours/weekend contact)

(3) In the event of an exceedance of a daily maximum discharge limitation, if any exist, the Permittee shall orally notify the DOH at the time the Permittee's authorized personnel becomes aware of the circumstances, but no later than 24 hours after the event.

b. Contact for Oral Reports

DEPARTMENT OF HEALTH	
Clean Water Branch (CWB) Environmental Management Division (EMD)	(808) 586-4309 (Regular office hours are Monday through Friday (excluding holidays) from 7:45 a.m. until 4:30 p.m.)
Wastewater Branch (WWB) EMD	(808) 586-4294 (Regular office hours are Monday through Friday (excluding holidays) from 7:45 a.m. until 4:30 p.m.)

DEPARTMENT OF HEALTH	
State-On-Scene Coordinator Office of Hazard Evaluation and Emergency Response (HEER)	(808) 226-3799 or (808) 251-1057 (For use outside of regular office hours.)
Hawaii State Hospital - Kaneohe	(808) 247-2191 (For use outside of regular office hours.)

ASSOCIATED PRESS (AP)	
Bureau Chief or Duty Editor	(808) 533-2422 or 536-5510 (Honolulu) 4:00 am - 11:30 pm (Monday - Friday) 5:00 am - 11:30 pm (Saturday and Sunday)

(1) Notification of specific news media (newspaper, television, radio, etc.) is left to the discretion of the Permittee. It is generally assumed that the specific news media are subscribers to the AP major wire services.

(2) Suggested Notifications:

The Honolulu Advertiser	(808) 525-8090
Honolulu Star-Bulletin	(808) 529-4747

c. Written Submission

(1) For those noncompliances requiring immediate reporting, the Permittee shall submit a written noncompliance report. The Permittee shall submit the report to the CWB at the address listed in Part D.1.b. of this permit within five (5) working days after the Permittee's authorized personnel becomes aware of the noncompliance.

(2) The report shall contain the following:

(a) A description of the noncompliance and its cause;
(b) The period of noncompliance, including exact dates and times;
(c) If the noncompliance has not been corrected, the anticipated time it is expected to continue;
(d) Summary of sampling data;
(e) Map of sampling locations;
(f) Public notification efforts, if any;
(g) Clean-up efforts, if any; and
(h) Steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance.

(3) The Director may waive the written report or the five-day deadline on a case-by-case basis for spills, bypasses, upsets, and violations of daily

maximum discharge limitations if the oral report has been received within 24 hours of the noncompliance or when the Permittee's authorized personnel becomes aware of the noncompliance.

d. The Permittee shall comply with the reporting requirements of HAR, Chapter 11-62, Section 11-62-06(g) which states:

"No person or the owner shall cause or allow any wastewater system to create or contribute to any of the following:

(1) Human illness;
(2) Public health hazard;
(3) Nuisance;
(4) Unsanitary condition;
(5) Wastewater spill, overflow, or discharge into surface waters or the contamination or pollution of state waters, except in compliance with a permit or variance issued under chapter 11-55, or a water quality certification or waiver obtained under chapter 11-54;
(6) A wastewater spill, overflow, or discharge (spill) onto the ground, except for R-1 water from a recycled water system that is implementing [Best Management Practices] BMPs approved by the director. The burden of proof is on the recycled water system's owner or operator to demonstrate that the spill qualifies for this exception;
(7) Harborage of vectors, including insects and rodents;
(8) Foul or noxious odors;
(9) Public safety hazard; or
(10) Contamination, pollution, or endangerment of drinking waters, except in compliance with a permit issued under chapter 11-23."

e. Other Noncompliance

The Permittee shall report all other instances of noncompliance not reported under Part D.3.a. of this permit at the time DMRs are submitted as required by Part D.2. of this permit. The noncompliance reports shall contain the information listed in Part D.3.c.(2) of this permit.

4. Other Reporting Requirements

The Permittee shall comply with the reporting requirements of 40 CFR Sections 122.41(1)(1) through 122.41(1)(5), and 122.41(1)(8) as incorporated by Standard NPDES Permit Conditions, Section 16. Parts D.1., D.2., and D.3. of this permit supersede the requirements of 40 CFR Sections 122.41(1)(6) and 122.41(1)(7).

E. SPECIAL REQUIREMENTS

1. Schedule of Submission

   a. Effluent and Receiving Water Monitoring Programs

      (1) Effluent Monitoring Program

      The Permittee shall submit an Effluent Monitoring Program (Program) which complies with Part A of this permit to the Director within 30 days after the issuance date of this permit. The Program shall include at a minimum, but not be limited to the following:

      (a) Sampling location map;
      (b) Sample holding time;
      (c) Preservation techniques;
      (d) Test method and method detection level; and
      (e) Quality control measures.

      (2) The DOH reserves the right to require the Permittee to revise the Program, as appropriate, as may be required for compliance with the terms and conditions of this permit.

      (3) Monitoring shall be conducted according to test procedures approved under 40 CFR Part 136 with detection limits low enough to measure the compliance with Part A of this permit. For cases where the discharge limitation is below the lowest detection limit of the appropriate test procedure, the compliance shall be based upon the lowest detection limit of the test method.

      (4) If a test method has not been promulgated for a particular constituent, the Permittee may use any suitable method for measuring the level of the constituent in the discharge provided the Permittee submits a description of the method or a reference to a published method.

   b. Within 60 days after the effective date of this permit, the Permittee shall submit a Process Control Program detailing the treatment facility monitoring and sampling procedures in accordance with Part E.3. of this permit to the Director for approval.

   c. Within 120 days after the effective date of this permit, the Permittee shall submit an initial investigation toxicity reduction evaluation workplan in accordance with Part C.2. of this permit to the Director and Regional Administrator.

   d. The Permittee shall develop and submit an implementation and monitoring plan within one (1) year of the date that DOH adopts the Total Maximum Daily Load Waste Load Allocation that identifies the Permittee as a source.

2. Operation and Maintenance

The Permittee shall submit a schedule for approval by the Director at least 14 days prior to any facility maintenance which the Permittee determines may result in exceedance of effluent limitations. The schedule shall contain a description of the maintenance and its purpose; the period of maintenance, including exact dates and times; and steps taken or planned to reduce, eliminate, and prevent occurrence of noncompliance.

3. Treatment Plant Maintenance and Process Solids Monitoring

The Permittee shall utilize a Process Control Program (a.k.a. a computerized maintenance and operation program) which is updated on a regular basis, i.e. no less than quarterly. The computerized program shall be identical or substantially similar to the program currently in use. The computerized program currently in use was initially approved by the Marine Corps in June 1989.

Treatment plant solids streams shall be subject to the minimum schedule of monthly and bimonthly grab sample monitoring as a part of routine operation and maintenance. The monitoring results shall be retained by the Permittee and submitted to the Director upon request.

4. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the Permittee shall either:

> Provide an alternative power source sufficient to operate the wastewater treatment facilities;

or, if such alternative power source is not in existence, and no date for its implementation is specified in this permit,

> Halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

5. Response to Sewage Spills, Bypasses, and Upsets

a. Definitions

(1) "Spill" means wastewater associated with the treatment or collection system that is caused to or allowed to fall, flow, overflow, or run out at locations other than the permitted discharge outfall.

(2) "Discharge" as used in this Part E.5. of this permit includes bypasses, spills and upsets.

b. Discharges to Surface Waters or Only to the Ground Outside the Facility's Fence

(1) Disinfection/Clean-up

(a) Sewage that is discharged shall be disinfected prior to being discharged if sufficient disinfection contact time is available. Best judgment should be used in determining the amount of chlorine added to the discharge if chlorine is used as a disinfectant. The Permittee shall comply with the total residual chlorine discharge limitation as specified in HAR, Chapter 11-55.

(b) Contaminated grounds shall be cleared of all debris and standing wastewater, and disinfected.

(2) Public Warnings

(a) The Permittee shall immediately post "Warning Signs" in the areas or near waters likely to be affected by the discharge and where public access is possible.

(b) The Director in care of the CWB shall also check whether the number and location of the posted "Warning Signs are sufficient. Authorization to remove the signs will also come from the Director in care of the CWB. The Director in care of the CWB may require the Permittee to post additional "Warning Signs" as needed and may assist in removal of the signs.

(c) The Permittee shall notify the AP News Wire Services of any discharge of 1,000 gallons or more to State waters, in accordance with Part D.3.a.(2) of this permit.

(c) The Permittee shall submit a written report in accordance with Part D.3.c. of this permit.

(3) Public Access

When or where standing wastewater cannot be removed from the ground, public access shall be limited by barricades or other means.

(4) Special Sampling of Surface Waters

(a) The Permittee shall conduct bacteria (Enterococci and either *Clostridium perfringens* or Fecal Coliform) sampling of discharges greater than 100 gallons, or when public health may be threatened, in the area of the receiving water affected by the discharge, as soon as possible. The results shall be submitted to the Director in care of the CWB immediately. Monitoring shall continue until notification to stop is received from the Director in care of the CWB.

(b) The Director in care of the CWB shall be informed of the location of sampling stations and may modify the number of stations and site selection.

(c) The Director in care of the CWB may require additional bacteria monitoring by the Permittee to supplement their existing monitoring program, as may be necessary or appropriate.

(5) For discharges less than 1,000 gallons immediate reporting to the Director in care of the WWB is not required. A tabulated summary of discharges less than 1,000 gallons shall be submitted quarterly to the Director in care of the WWB in accordance with Section 5.g.(2) of HAR, Chapter 11-62, Appendix C.

c. Discharges to the Ground within the Facility's Fence

(1) Major discharges (greater than 1,000 gallons) or chronic (occurring more than twice within a 12 month period) discharges shall be immediately reported to the Director in care of the WWB at the time the Permittee's authorized personnel become aware of the circumstances, but no later than 24 hours after the event. The Permittee shall submit a written report in accordance with Part D.3.c. of this permit.

(2) For discharges less than 1,000 gallons immediate reporting to the Director in care of the WWB is not required. A tabulated summary of discharges less than 1,000 gallons shall be submitted quarterly to the Director in care of the WWB in accordance with Section 9.b. of HAR, Chapter 11-62, Appendix C.

6. Onshore or Offshore Construction

This permit does not authorize or approve the construction of any onshore or offshore physical structures of facilities or the undertaking of any work in any waters of the United States.

7. Remedy or Penalty

Nothing in this permit waives any remedy or penalty applicable under HRS, Chapter 342D.

F. INDUSTRIAL PRETREATMENT REQUIREMENTS

1. Prohibitions

   It shall be a violation of this permit for the following to be introduced to the MCBH Kaneohe Bay WRF or sewer system:

   a. Hazardous waste.

   b. Pollutants which create a fire or explosion hazard.

   c. Pollutants which will cause corrosive or structural damage. In no case shall discharges to the treatment plant or sewer system have a pH less than 5.0 standard units.

   d. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the sewer system or treatment plant.

   e. Any pollutant, including heat and oxygen demanding pollutants (BOD, etc.) at a flow rate and/or pollutant concentration which will inhibit or disrupt the treatment plant, its processes or operations, or its sludge processes, use or disposal.

   f. Free oil, or unemulsified oily water with an oil concentration above 50 milligrams per liter (mg/l). "Oil" includes any petroleum product or organic solvent. It does not include animal or vegetable products.

2. Authorized Non-domestic Sewer Dischargers

   a. Facilities authorized to discharge non-domestic wastes to the MCBH Kaneohe Bay WRF sewer collection system are those identified in the Permittee's application dated March 2, 1994, and in "A Survey of Industrial Wastewater Discharges Kaneohe Marine Corps Air Station," dated April 1989, and any new facilities which are substantially similar to those identified in the documents above.

   b. The Permittee shall obtain approval from the Director to discharge from any non-domestic facility or process not meeting these criteria, or from any facility or process subject to an EPA effluent guideline. At least six (6) months before accepting discharges from any facility not previously authorized under the previous paragraph, the Permittee shall apply to the DOH for permission for that acceptance (Standard NPDES Permit Conditions Section 22).

3. Oil Water Separators

   a. All facilities with the potential to discharge oil to the sewer system, such as vehicle maintenance facilities and wash racks, shall be equipped with an oil water separator designed to handle peak hydraulic loads, and to prevent the discharge of free oil or unemulsified oil at a concentration greater than 50 mg/l (maximum).

b. Oil water separators shall be operated and maintained in accordance with Kaneohe Marine Corps Air Station, Order 11345.1, dated November 30, 1988 or subsequent amendments.

At a minimum, the Permittee shall provide the following of all non-domestic facilities that operate oil water separators:

(1) All oil water separators serving active facilities shall be visually inspected by removal of all covers not less than once per week to insure proper operation and removal of accumulated oil;

(2) A signed written log shall be kept documenting each inspection; and

(3) If an oil water separator is not operating correctly, or is full of oil, or is discharging oil to the sewer system, all operations contributing wastewater to the separator shall cease until the separator has received proper maintenance.

c. No oil water separator shall discharge directly to State waters or to any ditch or storm sewer which is tributary to a State water.

4. Annual Reports

The Permittee shall submit to the Director an annual report of industrial pretreatment activities containing the following information:

a. A list of all new non-domestic facilities and processes discharging to the sewer system.

b. A list of all active oil water separators, the location and discharge point of each separator, the names of the individuals responsible for routine inspection of each separator, and the number of inspections performed in the previous year. The report shall also include a summary of each instance where inspection or testing revealed that the separator was not operated or maintained correctly.

c. The annual report for the period covering the previous calendar year is due on **August 30th** of each year.

G. SLUDGE REQUIREMENTS

1. General Conditions and Requirements

   a. Acceptable Sludge Use/Disposal Practices

      (1) The Permittee shall dispose of all sludge generated at the facility at a municipal solid waste landfill, at a sludge surface disposal site, by land application, or by transferring the sludge to another party for further treatment, use, or disposal in accordance with all applicable portions of 40 CFR Parts 257, 258, 503 and HAR, Chapters 11-58.1 and 11-62.

      (2) Storage of sludge for over two (2) years from the time it is generated shall be considered to be surface disposal. The storage site shall meet all the requirements of a surface disposal site under 40 CFR Part 503 Subpart C and HAR, Chapters 11-58.1 and 11-62. If the Permittee desires to store sludge for longer periods of time prior to final disposal, the Permittee shall submit a written request to the EPA Regional Sludge Coordinator and Director containing the information required under 40 CFR Section 503.20(b).

      (3) The Permittee shall dispose of sludge containing more than 50 mg/kg of PCBs in accordance with 40 CFR Part 761.

      (4) If the Permittee desires to dispose of sludge using a method not listed above, the Permittee shall submit a request for permit modification to EPA Regional Sludge Coordinator and Director 180 days prior to the commencement of the alternate disposal practice.

   b. Duty to Mitigate

      (1) The Permittee shall be responsible for ensuring the following:

         (a) All sludge produced at its facility is used/disposed of in accordance with 40 CFR Parts 257, 258, 503, and HAR, Chapters 11-58.1, and 11-62, whether the Permittee uses/disposes of the sludge itself or transfers it to another party for further treatment, use, or disposal.

         (b) Subsequent preparers, appliers, or disposers of the sludge are informed of the requirements under 40 CFR Parts 257, 258, 503, and HAR, Chapters 11-58.1 and 11-62.

         (c) Sludge is not allowed to enter waters of the United States, or to contaminate an underground drinking water source. Any sludge treatment, storage, or disposal site shall have adequate facilities which divert surface runoff from adjacent areas, protect site boundaries from erosion, and prevent any conditions that would cause drainage to escape from the site. Adequate protection is defined as protection from at least a 100-year storm and from the highest tidal stage that may occur.

(d) Sludge treatment, storage, use, and disposal does not create a public nuisance.

(e) Haulers who ship non-Class A sludge off-site for additional treatment, use, or disposal take all necessary measures to keep sludge contained.

(2) The Permittee shall take all reasonable steps to prevent or minimize any sludge use or disposal which has a likelihood of adversely affecting human health or the environment.

c. Other Conditions

(1) The Director may promptly modify or revoke and reissue this permit to incorporate any applicable standard for sewage sludge use or disposal promulgated under the Act, Section 405(d), or adopted under HRS, Chapter 342D, or HAR, Chapter 11-62, if the standard is more stringent than the standard in this permit or covers a pollutant or practice not covered in this permit.

(2) The sludge requirements in this part are supplemental to the other conditions of this permit. In the event of a conflict, those requirements more protective of the environment shall apply.

(3) The requirements in 40 CFR Part 503 are enforceable by the EPA independently of being included in this permit.

2. Sludge Limitations and Monitoring Requirements

a. Sludge shall be limited and monitored by the Permittee as specified below:

(1) Sludge Disposed of in Municipal Solid Waste Landfills

Monitoring Parameter/ Test Procedures	Limitation (mg/kg)	Monitoring Frequency
Paint Filter Test (SW-486, EPA Method 9095)	{1}	Once/Year (Minimum)
Toxicity Characteristic Leaching Procedure (TCLP) Test {2}	{3}	Once/Year
Priority Pollutants {4}	{5}	Once/Year {6}

NOTES:
{1} No "Free Liquids" as defined in EPA Method 9095.
{2} The parameters to be tested by the TCLP test and their limitations are specified in 40 CFR Section 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic and in Attachment A of this permit.
{3} Limits for hazardousness listed in 40 CFR Section 261.23.
{4} Priority Pollutants are listed under the Act, Section 307(a) and in Attachment B of this permit.
{5} No limitation at this time. Only monitoring and reporting required.
{6} Priority Pollutants shall be tested more frequently if required under a pretreatment program.

(2) Sludge Disposed of in Surface Disposal Sites (Sludge-only Landfill or Disposal on Land Not for the Purpose of Improving Plant Growth)

Monitoring Parameter/ Test Procedures	Limitation (mg/kg)							Monitoring Frequency
	0<25m	25<50m	50<75m	75<100m	100<125m	125<150m	>150m	
Arsenic {1}	30	34	39	46	53	62	73	{2}
Chromium {1}	200	220	260	300	360	450	600	{2}
Nickel {1}	210	240	270	320	390	420	420	{2}
TCLP Test {3}	{4}							Once/Year
Priority Pollutants {5}	{6}							Once/Year {7}

mg/kg = milligram per kilogram

NOTES:
{1} The Permittee shall monitor for this parameter only if sludge is disposed of in a unit with no liner and leachate system. Limitations are based on the distance (meters) from the active sludge unit boundary to the nearest property line.
{2} Monitoring frequency shall be determined by the following table:

Annual Production, Dry Weight (Metric Tons/365 days)	Frequency
0 - 290	Once/Year
290 - 1,500	Once/Quarter
1,500 - 15,000	Once/60 days
Over 15,000	Once/Month

{3} The parameters to be tested by the TCLP test and their limitations are specified in 40 CFR Section 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic and in Attachment A of this permit.
{4} Limits for hazardousness listed in 40 CFR Section 261.23.
{5} Priority Pollutants are listed under the Act, Section 307(a) and in Attachment B of this permit.
{6} No limitation at this time. Only monitoring and reporting required.
{7} The Permittee shall test for priority pollutants more frequently if required under the pretreatment program.

(3) Sludge that is Land-Applied (Added to Soil for the Purpose of Improving Plant Growth)

Monitoring Parameter/ Test Procedures	Limitation {1} (mg/kg)	Monitoring Frequency
Arsenic	41	{2}
Cadmium	39	{2}
Chromium	1,200	{2}

Monitoring Parameter/ Test Procedures	Limitation {1} (mg/kg)	Monitoring Frequency
Copper	1,500	{2}
Lead	300	{2}
Mercury	17	{2}
Molybdenum	75	{2}
Nickel	420	{2}
Selenium	36	{2}
Zinc	2,800	{2}
TCLP test {3}	{4}	Once/Year
Priority Pollutants {5}	{6}	Once/Year {7}

NOTES:

{1} Limitation is for sludge that is used for agricultural land, forest, or land reclamation applications.

{2} Monitoring frequency shall be determined by the following table:

Annual Production, Dry Weight (Metric Tons/365 days)	Frequency
0 - 290	Once/Year
290 - 1,500	Once/Quarter
1,500 - 15,000	Once/60 days
Over 15,000	Once/Month

{3} The parameters to be tested by the TCLP test and their limitations are specified in 40 CFR Section 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic and in Attachment A of this permit.

{4} Limits for hazardousness listed in 40 CFR Section 261.23.

{5} Priority Pollutants are listed under the Act, Section 307(a) and in Attachment B of this permit.

{6} No limitation at this time. Only monitoring and reporting required.

{7} The Permittee shall test for priority pollutants more frequently if required under the pretreatment program.

b. The Permittee shall develop a representative sampling plan for monitoring toxics reduction, including the number and location of sampling points.

(1) If sludge generated at the facility is land applied or disposed at a surface disposal site, the sampling plan shall also include pathogens and vector attraction reduction monitoring.

(2) If pathogen reduction is determined by time and temperature, the plan shall be designed to determine temperatures throughout the batch being treated.

(3) If windrow composting is used, temperature shall be measured at least once for each 150 feet of windrow and include measurements at depths of 12 to 24 inches below the surface.

3. Requirements for Sludge Disposed of in Municipal Solid Waste Landfills

   a. Sludge shall be disposed of in municipal solid waste landfills that meet the requirements of 40 CFR Part 258 and HAR, Chapter 11-58.1. The Permittee shall contact the DOH, Solid Waste Branch annually to verify that the landfill used is in compliance with 40 CFR Section 258.

   b. Sludge shall not contain "free liquids" as defined by EPA Method 9095 (Paint Filter Liquids Test).

4. Requirements for Sludge Disposed of in Surface Disposal Sites (Sludge-only Landfill or Disposal on Land Not for the Purpose of Improving Plant Growth)

   a. Sludge that is disposed of in a sludge-only landfill shall meet the general requirements, pollutant limits (for surface disposal sites without liners and leachate systems), management practices, and operational standards in 40 CFR Part 503 Subpart C and additional pollutant limits requested by the Director.

   b. The Permittee shall have a qualified groundwater scientist develop a groundwater monitoring program for the surface disposal site or certify that the placement of sludge on the site will not cause aquifer contamination.

   c. Sludge shall meet the following management practices:

      (1) Disposal of sludge in surface disposal sites shall be conducted in a manner that will not contaminate the groundwater underlying the site and in a manner that will not cause a violation of any receiving water quality standard from discharges of surface runoff;

      (2) Disposal of sludge in surface disposal sites shall not cause or contribute to the harm of a threatened or endangered species or result in the destruction or adverse modification of critical habitat of a threatened or endangered species and shall not restrict the flow of a 100-year flood;

      (3) The surface disposal sites shall take measures to prevent public exposure to potential health and safety hazards; and

      (4) Explosive gases generated by the facility shall not exceed 25 percent of the lower explosive limit for the gases in facility structures and 100 percent of the lower explosive limit at the property line.

5. Requirements for Sludge that is Land-Applied (Added to Soil for the Purpose of Improving Plant Growth)

   a. Exceptional quality sludge shall not be subject to the general requirements under 40 CFR Section 503.12 and management practices under 40 CFR Section 503.14 unless the Director determines that these requirements are necessary to protect public health and the environment.

b. Preparers and appliers of non-exceptional quality sludge shall meet the general requirements and management practices specified in 40 CFR Part 503 Subpart B; Class A or B pathogen reduction levels with the associated access restrictions specified in 40 CFR Section 503.32; and one (1) of the 10 vector attraction reduction requirements specified in 40 CFR Sections 503.33(b)(1) through 503.33(b)(10).

c. Preparers of non-exceptional quality sludge shall provide a written notification of the nitrogen content of the sludge to all appliers.

d. Appliers of non-exceptional quality sludge shall determine the agronomic rate for the crops to be grown and certify that the sludge is applied at a rate not exceeding the agronomic rate determined for each crop.

6. Notification Requirements

a. If sludge other than exceptional quality sludge is shipped to another state or to Indian lands, the Permittee shall send 60 days prior notice of the shipment to the permitting authorities in the receiving state or Indian land (the EPA Regional Office for that area and the State or Indian authorities).

b. The Permittee shall notify the EPA Regional Sludge Coordinator and the Director of any noncompliance that may seriously endanger public health or the environment within 24 hours after becoming aware of the noncompliance. A written noncompliance report shall be submitted, postmarked, or faxed within five (5) working days after the Permittee becomes aware of the noncompliance.

c. The Permittee shall report all other instances of noncompliance not reported under Part G.6.b. at the time DMRs are submitted as required by Part D.2. of this permit.

7. Annual Report

a. By **February 19th** of each year, the Permittee shall submit an annual report on sludge management activities during the previous calendar year to the EPA Regional Sludge Coordinator and the Director. The report shall provide the following information:

(1) The total amount of sludge generated that year and a breakdown of the usage/disposal methods employed (in dry weight, metric tons);

(2) Results of all monitoring required by Part G.2. of this permit;

(3) If sludge was disposed of in a municipal solid waste landfill, then the Permittee shall include the following certification statement:

"I certify under the penalty of law, that the paint filter test and toxicity characteristic leaching procedure test requirements have been met, and that vector attraction reduction requirements have been met by the municipal solid waste landfill. This determination has been made under my direction and supervision in accordance with the

system designed to assure that qualified personnel properly gather and evaluate the information used to determine that the necessary requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(4) If sludge was disposed of in a surface disposal site, the following information shall be included:

(a) Requirements specified in 40 CFR Section 503.27.

(b) Name and mailing address of surface disposal operator if different from Permittee.

(c) Location (street address, latitude, and longitude) of surface disposal site.

(d) Results of groundwater monitoring, or a copy of a certification by a groundwater scientist (including the scientist's name, title, and phone number) that the placement of sludge at the surface disposal site will not cause aquifer contamination.

(5) If sludge was land-applied, the following information shall be included:

(a) Requirements specified in 40 CFR Section 503.17(a) for all facilities preparing sludge for land application or reference to that facility's report, if submitted to EPA separately.

(b) Names and addresses of all facilities receiving non-exceptional quality sludge, including land appliers and those facilities providing further treatment/blending prior to land application;

(c) Location of land application sites of non-exceptional quality sludge (street address, latitude, and longitude) and sizes of parcels;

(d) Crops grown, agronomic rate for the crops grown, and certification by the land appliers of non-exceptional quality sludge that the sludge was applied at a rate not exceeding the agronomic rate determined for each crop;

(e) Copies of other certification statements by the land appliers of non-exceptional quality sludge;

(6) If sludge was stored, the following information shall also be included:

(a) Age of stored sludge.

(b) Name and mailing address of operator of storage site if different from Permittee.

(c) Location of stored sludge (street address, latitude, and longitude).

(7) If sludge was disposed using other methods, descriptions of the methods employed and the locations (street address, latitude, and longitude) of the usage/disposal sites shall be included.

b. Annual reports shall be submitted to the following agencies:

(1) Director of Health
Clean Water Branch
Environmental Management Division
State Department of Health
P.O. Box 3378
Honolulu, HI 96801-3378

(2) Regional Sludge Coordinator (WTR-7)
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105

H. WASTEWATER POLLUTION PREVENTION PROGRAM

1. Annual Report

   The Permittee shall submit to the Director by **February 28th** of each year an annual report summarizing the critical parameters which affect the operations of the subject facility. This report shall include, at a minimum, the evaluation of critical parameters such as:

   a. Flow,

   b. Biochemical Oxygen Demand Loading,

   c. Suspended Solids Loading,

   d. Toxic Pollutants and Impacts of Septic Wastes,

   e. Growth Potential of the Service Area,

   f. Impact of New Regulations,

   g. Bypasses and Overflows,

   h. Effectiveness and Condition of the Permitted Facility's Collection System,

   i. Reported Design Capacity in Permit, and

   j. Actual Treatment Capacity Based on Additional Information.

2. Flow Rate Notification

   The Permittee shall notify the Director and the Regional Administrator in writing not later than 90 days after the 30-day average dry weather discharge flow rate first equals or exceeds 75% of the actual treatment capacity of the Permittee's facility as reported above in Part H.1.j. of this permit. This report shall include:

   a. The date on which the 30-day average discharge flow rate first equals or exceeds 75% of the actual treatment capacity of the Permittee's facility,

   b. The Permittee's estimate of when the 30-day average discharge flow rate will equal or exceed the actual treatment capacity of the Permittee's facility, and

   c. The Permittee's schedule of compliance to provide additional treatment capacity before the 30-day average discharge flow rate equals the present actual treatment capacity of the Permittee's facility.

   The Permittee shall comply with the provisions of the schedule of compliance after approval by the Director. In implementing the schedule of compliance, the Permittee shall initiate "contingency plans" to provide additional treatment capacity not later than 90 days after the 30-day average discharge flow rate first equals or exceeds

85% of the actual treatment capacity of the Permittee's facility as reported in Part H.1.j. of this permit.

Special exemptions to eliminate the contingency plan requirement may be granted by the Director. Exemptions from this requirement must be requested in writing and may be made a part of the annual report. The Director will notify the Permittee in writing of the decision concerning the request for the construction exemption.

I. STORM WATER MONITORING AND REPORTING REQUIREMENTS

Outfall Serial No. 002

1. Limitations and Monitoring Requirements

During the period beginning with the effective date of this permit and lasting through **July 31, 2011**, the Permittee is authorized to discharge storm water runoff associated with industrial activities at MCBH Kaneohe Bay WRF from Outfall Serial No. 002 at the southwestern corner of the facility to Kaneohe Bay. The discharge from Outfall Serial No. 002 through the facility located at coordinates: Latitude 21°26'30"N and Longitude 157°45'45"W shall be limited and monitored by the Permittee as specified below:

Parameter	Effluent Limitation {1}	Minimum Monitoring Frequency {2}	Type of Sample {3}
Flow (GPD)	{5}	Annually	Calculated or Estimated
Biochemical Oxygen Demand (5-Day) (mg/l)	{5}	Annually	Composite {4}
Chemical Oxygen Demand (mg/l)	{5}	Annually	Composite {4}
Total Suspended Solids (mg/l)	100	Annually	Composite {4}
Total Phosphorus (mg/l)	{5}	Annually	Composite {4}
Total Nitrogen (mg/l) {4}	{5}	Annually	Composite {4}
Nitrate + Nitrite Nitrogen (mg/l)	{5}	Annually	Composite {4}
Oil and Grease (mg/l)	15	Annually	Grab {7}
pH Range (Standard Units)	7.0 - 8.6	Annually	Grab {8}
Toxic Pollutants (µg/l) {9}	{10}	Annually	{11}

GPD = gallons per day
mg/l = milligrams per liter = 1000 micrograms per liter
µg/l = micrograms per liter

NOTES:

{1} Pollutant concentration levels shall not exceed the storm water discharge limits or be outside the ranges indicated in the table. Actual or measured levels which exceed those storm water discharge limits or are outside those ranges shall be reported to the Director within 30 days after the Permittee becomes aware of the results. The Permittee shall provide the DOH with an explanation of the pollutant origin. Monitoring results shall be submitted on the DMR Form. This requirement shall supersede the immediate reporting requirement in Part D.2.a. of this permit for these limitations only.

{2} "Annually" means once per calendar year.

{3} The Permittee shall collect samples for analysis from a discharge resulting from a representative storm. A representative storm means a rainfall that accumulates more than 0.1 inch of rain and occurs at least 72 hours after the previous measurable (greater than 0.1 inch) rainfall event.

"Grab sample" means a sample collected during the first 15 minutes of the discharge.

"Composite sample" means a combination of at least two (2) sample aliquots, collected at periodic intervals. The composite shall be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to the total flow of storm water discharge flow since the collection of the previous aliquot. The Permittee may collect aliquots manually or automatically.

Samples for analysis shall be collected during the first 15 minutes of the discharge and at 15-minute intervals thereafter for the duration of the discharge, as applicable. If the discharge lasts for over an hour, sample collection may cease.

{4} If the duration of the discharge event is less than 30 minutes, the sample collected during the first 15 minutes of the discharge shall be analyzed as a grab sample and reported toward the fulfillment of this composite sample specification. If the duration of the discharge event is greater than 30 minutes, the Permittee shall analyze two (2) or more sample aliquots as a composite sample.

{5} No limitation at this time. Only monitoring and reporting is required.

{6} The Total Nitrogen parameter is a measure of all nitrogen compounds in the sample (nitrate, nitrite, ammonia, dissolved organic nitrogen, and organic matter present as particulates).

{7} The Permittee shall measure Oil and Grease using EPA Method 1664, Revision A.

{8} The Permittee shall measure pH within 15 minutes of obtaining the grab sample.

{9} Toxic pollutants, as identified in Appendix D of 40 CFR Part 122 or in HAR, Chapter 11-54, Section 11-54-4, need only be analyzed if they are identified as potential pollutants requiring monitoring in the SWPCP. The Permittee shall test for the total recoverable portion of all metals. If monitoring results indicate that the discharge limitation was equaled or exceeded, the SWPCP shall be amended to include additional BMPs targeted to reduce the parameter which was in excess of the discharge limitation.

{10} Discharge limitations are the acute water quality standards established in HAR, Chapter 11-54, Section 11-54-4(b)(3), for saline waters. For pollutants which do not have established acute water quality standards, any detected concentration greater than 0.01 mg/l shall be reported.

{11} Cyanide and the volatile fraction of the toxic organic compounds shall be sampled by grab sample. All other pollutants, as identified in Appendix D of 40 CFR Part 122 or in HAR, Chapter 11-54, Section 11-54-4, shall be sampled by composite sample.

2. Monitoring Methods

a. Conduct monitoring in accordance with test procedures approved under 40 CFR Part 136, or unless otherwise specified, with detection limits low enough to measure compliance with the discharge limitations specified in Part I.1 of this permit. For cases where the discharge limitation is below the lowest detection limit of the appropriate test procedure, the Permittee shall use the test method with the lowest detection limit.

b. The Director may specify additional monitoring requirements and limitations, in addition to the monitoring requirements specified in Part I.1. of this permit.

3. Sampling Location

The Permittee shall sample the storm water runoff prior to discharge to Kaneohe Bay.

4. Storm Water Pollution Control Plan (SWPCP)

   The Permittee shall:

   a. Continue to implement its SWPCP to control storm water discharge associated with the MCBH Kaneohe Bay WRF;

   b. Submit an updated SWPCP to the Director within 120 days of the effective date of this permit;

   c. Implement the updated SWPCP upon its submission to the Director;

   d. Review and update the SWPCP as often as needed or as required by the Director;

   e. Revise their SWPCP should any single discharge limitation or water quality standard established in HAR, Chapter 11-54, Section 11-54-4, for marine waters be exceeded. The revision shall include BMPs and/or other measures to reduce the amount of pollutants found to be in exceedance from entering storm water runoff;

   f. Report any major changes or revisions to the SWPCP to the Director within 30 days from the date the revisions were made;

   g. Maintain documentation of all revisions made to the SWPCP; and

   h. Maintain a copy of the SWPCP at the facility.

J. SPECIFIC WATER QUALITY PARAMETERS EFFLUENT REQUIREMENTS

1. Monitoring Requirements

The Permittee shall monitor the effluent for total nitrogen and total phosphorus in accordance with Part A.1. of this permit. The specific water quality parameters monitored shall not exceed the following operations performance threshold values more than once in 12 consecutive months:

PARAMETER	THRESHOLD VALUE	UNITS	MONITORING FREQUENCY	TYPE OF SAMPLE
Total Nitrogen	30	mg/l	Once/ Calendar Month	24-Hour Composite
Total Phosphorus	6.99	mg/l	Once/ Calendar Month	24-Hour Composite

mg/l = milligrams per liter

2. Initial Investigation Evaluation Plan

a. Within 120 days after the effective date of this permit, the Permittee shall submit an initial investigation evaluation plan. At a minimum, the plan shall include a brief description of the investigation and evaluation techniques that would be used to identify potential causes of the following:

(1) Any exceedance of the parameters listed in the table under Part J.1. of this permit;

(2) Effluent variability; and

(3) Treatment system efficiency.

b. If the monitoring results exceed any of the threshold values specified in Part J.1. of this permit, the Permittee shall conduct an initial investigation evaluation in accordance with their plan and submit the results of the evaluation with the DMR for that monitoring period.

3. Increase in Monitoring and Reporting Requirements

If the Permittee exceeds or will exceed the criteria for any parameter specified in Part J.1. of this permit more than once in 12 consecutive months, the Permittee shall increase the monitoring frequency and reporting for those parameters in exceedance to once per week. The monitoring frequency and reporting shall remain at once per week until the monitoring results are below the threshold value for three consecutive weeks. After this is achieved, monitoring and reporting for those parameters shall return to once per month.

4. Reduction Evaluation Plan

a. If the Permittee exceeds or will exceed the criteria for any parameter specified in Part J.1. of this permit more than twice in 12 consecutive months, or if

requested by the Director, the Permittee shall submit a reduction evaluation plan and implementation schedule within 45 calendar days after the third exceedance or request by the Director.

b. The reduction evaluation shall determine the cause of exceedance, outline measures that will be or have been implemented to ensure compliance with the criteria, and include an implementation schedule.

c. Upon completion of the reduction evaluation, this permit may be modified, or alternatively revoked and reissued, in order to incorporate appropriate permit conditions and implementation schedules.

K. DEFINITIONS

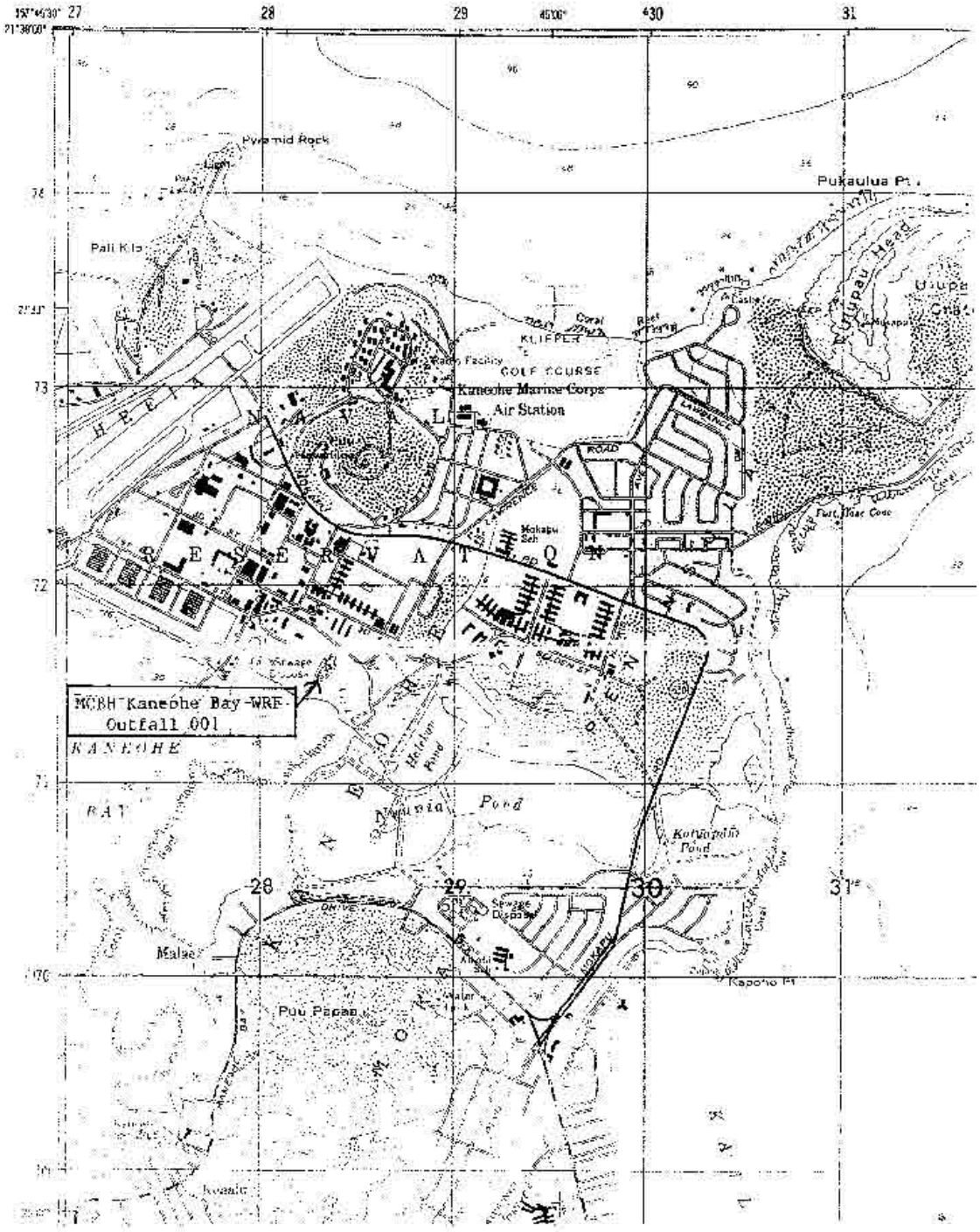
7-day Average	The "7-day average" is the "Average Weekly Concentration" as defined in the Standard NPDES Permit Conditions (updated as of December 30, 2005).
30-day Average	The "30-day average" is the "Average Monthly Concentration" as defined in the Standard NPDES Permit Conditions (updated as of December 30, 2005).
Acute Toxic Unit	Acute toxic unit (TU_a) is the reciprocal of the effluent concentration that causes 50 percent of the organisms to die by the end of the acute exposure period (i.e., 100 LC_{50}).
Chronic Toxic Unit	Chronic toxic unit (TU_c) is the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the chronic exposure period (i.e., 100/NOEC).
Composite Sample	Composite sample means a combination of at least eight (8) sample aliquots, collected at periodic intervals during a 24-hour period. The composite shall be flow proportional; either the time interval between each aliquot or the volume of each stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.
Daily Maximum	The "Daily Maximum" is the "Maximum Daily Concentration" as defined in the Standard NPDES Permit Conditions (updated as of December 30, 2005).
Design Capacity	Design capacity is the theoretical capacity of a facility developed without the benefit of operating records.
Exceptional Quality Sludge	Sludge that meets the pollutant concentration limits in Tables I and III of 40 CFR Section 503.13; Class A pathogen limits; and one (1) of the vector attraction reduction requirements in 40 CFR Sections 503.33(b)(1) through 503.33(b)(8).
Grab Sample	Grab sample means an individual sample collected at a randomly-selected time over a period not exceeding 15 minutes.
Recorder/Totalizer	A device that continuously sums or adds the flow in gallons or million gallons.
Toxic Units	Toxic Units (Tus) are a measure of toxicity in an effluent as determined by the acute toxicity units or chronic toxicity units measured.

Treatment Capacity	Treatment capacity is the actual capacity of a facility developed based on the actual operating records.
Treatment Facility	Treatment facility is all processes designed to improve the quality of the wastewater which is intended to be discharged as plant effluent.
Trunk Sewer	Trunk sewers are large sewers that are used to convey wastewater from main sewers to the treatment facility.
Waste Stream	Waste stream is wastewater which enters the plant and is intended to be discharged as plant effluent.

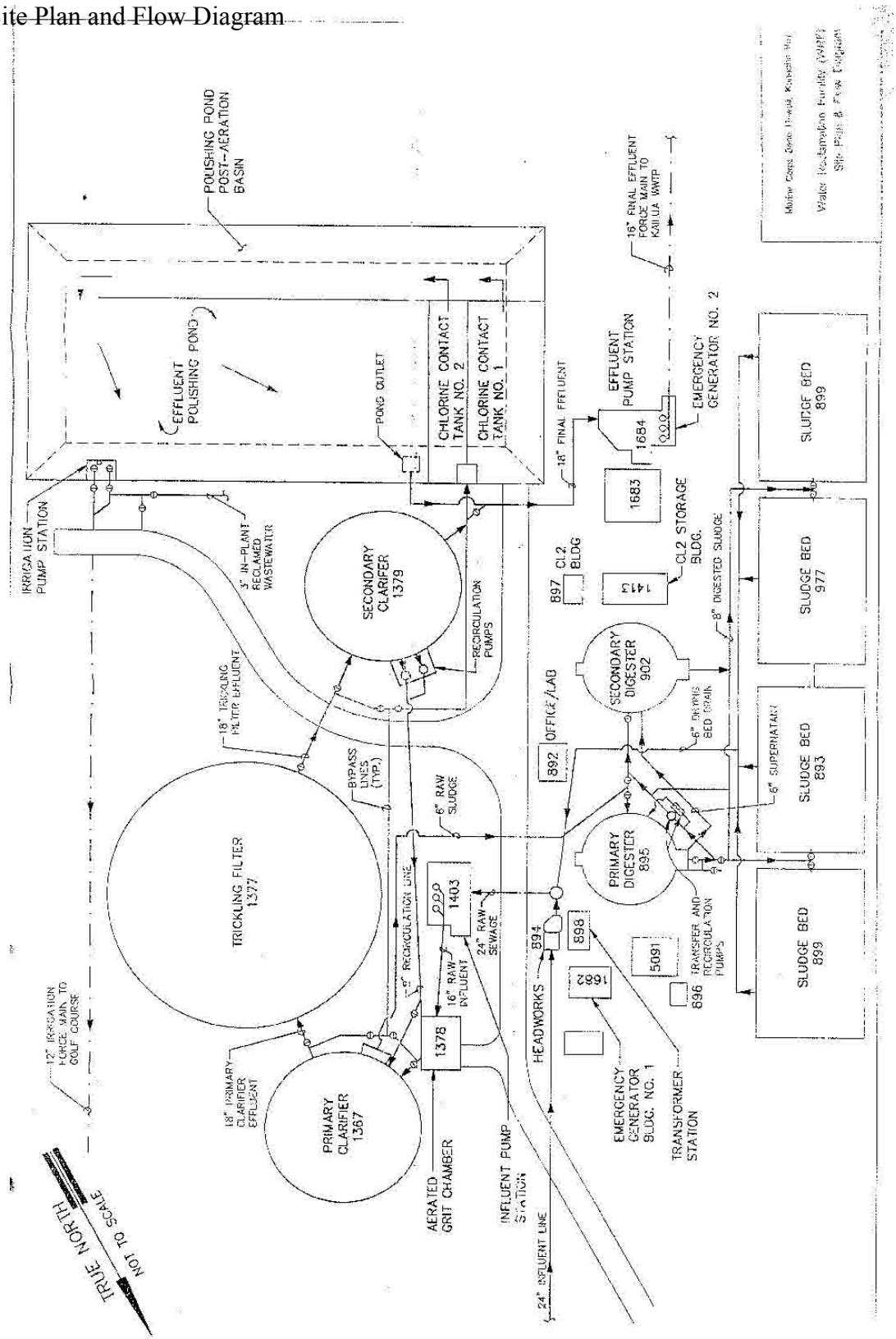
L. MCBH KANEOHE WRF MAPS AND DIAGRAMS

1. Location Map

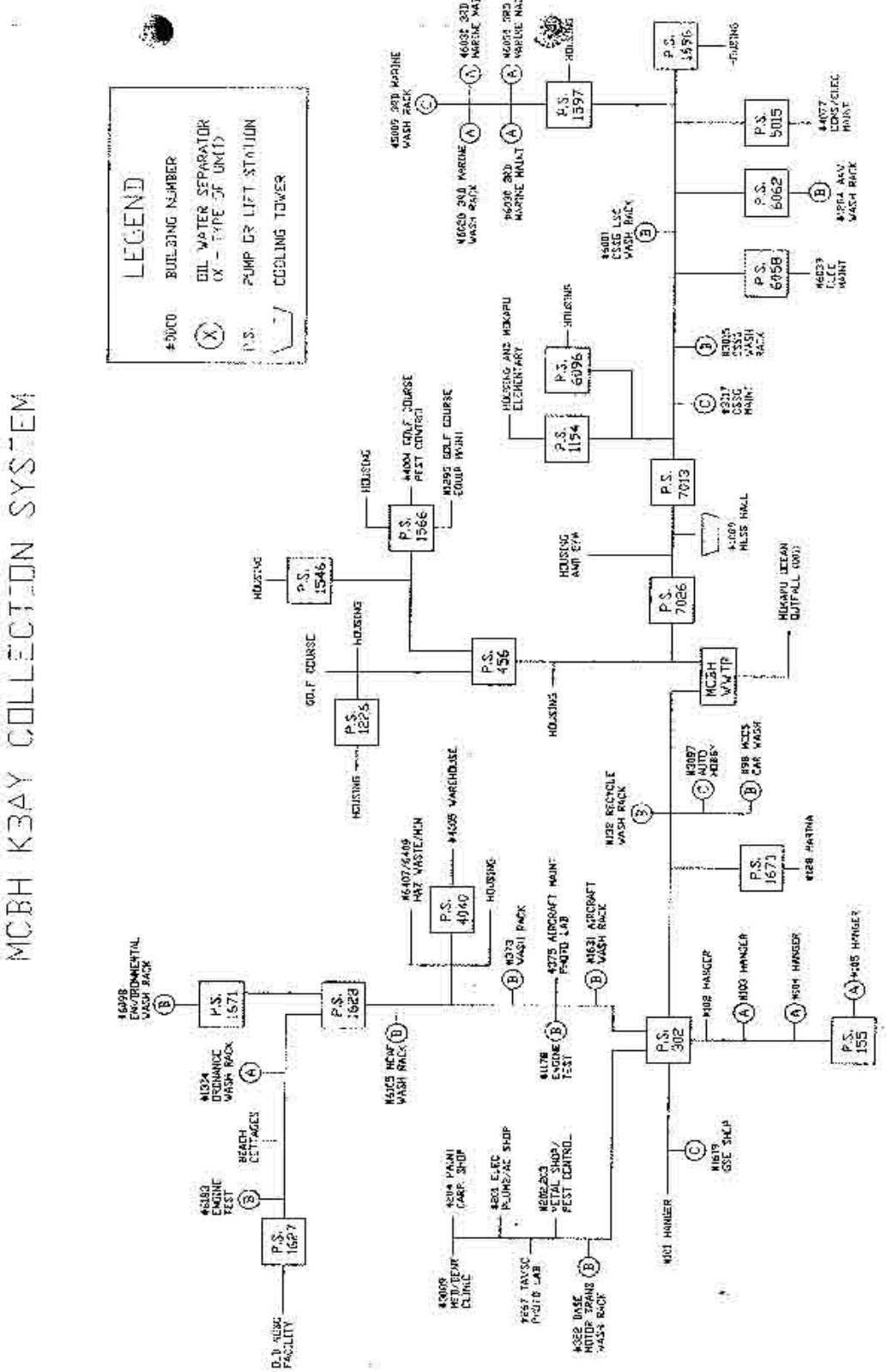
HAWAII 1:25,000



2. Site Plan and Flow Diagram



3. Collection System Diagram



ATTACHMENT A: TCLP PARAMETER LIST

Maximum Concentration of Contaminants for the Toxicity Characteristic
(40 CFR Section 261.24, Table 1)

EPA Hazardous Waste Number	Contaminant	Chemical Abstracts Service Number	Regulatory Level (mg/l)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	54-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7	200.0 [1]
D024	m-Cresol	108-39-4	200.0 [1]
D025	p-Cresol	106-44-5	200.0 [1]
D026	Cresol	---	200.0 [1]
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	0.13 [2]
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	0.13 [2]
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0

EPA Hazardous Waste Number	Contaminant	Chemical Abstracts Service Number	Regulatory Level (mg/l)
D036	Nitrobenzene	98-95-3	2.0
D037	Pentrachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	5.0 [2]
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D043	Vinyl Chloride	75-01-4	0.2

Notes:

[1] If o-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

[2] Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

ATTACHMENT B: PRIORITY POLLUTANTS

Metals
Antimony
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

Other
Cyanide
Asbestos

Pesticides
Aldrin
Dieldrin
Chlordane
4,4-DDT
4,4-DDE
4,4-DDD
Alpha-Endosulfan
Beta-Endosulfan
Endosulfan Sulfate
Endrin
Endrin Aldehyde
Heptachlor
Heptachlor Epoxide
Alpha-BHC
Beta-BHC
Gamma-BHC(Lindane)
Delta-BHC
PCB 1016
PCB 1221
PCB 1232
PCB 1242
PCB 1248
PCB 1254
PCB 1260
Toxaphene

Base/Neutral Extractables
Acenaphthene
Benzidine
1,2,4-Trichlorobenzene
Hexachlorobenzene
Hexachloroethane
Bis(2-Chloroethyl) Ether
2-Chloronaphthalene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
3,3-Dichlorobenzidine
2,4-Dinitrotoluene
2,6-Dinitrotoluene
1,2-Diphenylhydrazine
Fluoranthene
4-Chlorophenyl Phenyl Ether
4-Bromophenyl Phenyl Ether
Bis(2-Chloroisopropyl)Ether
Bis(2-Chloroethoxy)Methane
Hexachlorobutadiene
Hexachlorocyclopentadiene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodimethylamine
N-Nitrosodiphenylamine
N-Nitrosodi-N-Propylamine
Bis(2-Ethylhexyl)Phthalate
–Butyl Benzyl Phthalate
Di-N-Butyl Phthalate
Di-N-Octyl Phthalate
Diethyl Phthalate
Dimethyl Phthalate
1,2-Benzanthracene
3,4-Benzo-Pyrene
3,4-Benzofluoranthene
11,12-Benzofluoranthene
Chrysene
Acenaphthylene
Anthracene
1,12-Benzoperylene
Fluorene
Phenanthrene
1,2,5,6-Dibenzanthracene
Indeno(1,2,3-CD)Pyrene
Pyrene
TCDD

Acid Extractables
2,4,6-Trichlorophenol
P-Chloro-M-Cresol
2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2-Nitrophenol
4-Nitrophenol
2,4-Dinitrophenol
4,6-Dinitro-O-Cresol
Pentachlorophenol
Phenol

Volatile Organics
Acrolein
Acrylonitrile
Benzene
Carbon Tetrachloride
Chlorobenzene
1,2-Dichloroethane
1,1,1-Trichloroethane
1,1-Dichloroethane
1,1,2-Trichloroethane
1,1,2,2-Tetrachloroethane
Chloroethane
2-Chloroethyl Vinyl Ether
Chloroform
1,1-Dichloroethylene
1,2-Trans-Dichloroethylene
1,2-Dichloropropane
1,3-Dichloropropene
Ethylbenzene
Methylene Chloride
Methyl Chloride
Methyl Bromide
Bromoform
Bromodichloromethane
Dibromochloromethane
Tetrachloroethylene
Toluene
Trichloroethylene
Vinyl Chloride